#### AFFIDAVIT

State	of	Nebraska	)	
			)	SS
Lancaster County			)	

Montica LaRue, being first duly sworn, upon her oath, deposes and says as follows:

> C T Corporation System 206 So. 13th St., Suite 1500 Lincoln, NE 68508

Subscribed and sworn to in my presence this 7 day of , 1996.

Notary Public

GENERAL NOTARY-State of Nebraska
NOEL S. DEKALB
My Comm. Exp. March 31, 1998

#### Appendix A - Work Practices Manual

The work practice manual consists of the following work practice procedures as required by paragraph 12 of the <u>Amended Complaint and Compliance Order</u> in case number 1520.

Procedure	Date of Revision
Dore Baghouse Dust Unloading	July 1, 1994
Residue Vent Baghouse Dust Unloading	July 1, 1994
Antimony Baghouse Dust Unloading	July 1, 1994
Antimony Oxide Continuous Offgrade Baghouse Dust Unloading	July 1, 1994
Antimony Oxide Intermittent Offgrade Baghouse Dust Unloading	July 1, 1994
Softener Baghouse Dust Unloading	May 22, 1996
Smelter Baghouse Dust Unloading	May 22, 1996
Street Sweeping, Application of Dust Suppressants, and Stockpile Tarping	May 22, 1996
Omaha Spill Control Plan to Minimize Lead Emissions	May 30, 1996
Omaha Dust Control Plan for Construction Projects	March 22, 1994

## DORE' BAGHOUSE DUST UNLOADING ASARCO - Omaha Plant

#### I. OBJECTIVE

The Dore' baghouse services the Dore' Department. Prior to discharge, emissions from the Dore' Department processes pass through the dore' baghouse where particulate matter is filtered and collected in one of six dust hoppers (#1-#6). Periodically, the collected dust must be removed from the hoppers and transported to the Residue Department for storage prior to further processing. During the unloading activity, fugitive dust emissions containing lead can be created.

The objective of the following work practice procedure is to minimize, control and prevent the escape of fugitive dust emissions during the removal, transportation and subsequent unloading of the Dore' baghouse dust. This will be accomplished through the utilization of special equipment and the implementation of work practice procedures described below.

## II. RESPONSIBILITY

The Environmental Services Department supervisor shall be responsible for assuring that Dore' baghouse dust unloading is conducted according to the stated procedure. Dust shall not be removed from the Dore' baghouse without authorization from the Residue Department supervisor or higher management. The Environmental supervisor will also be responsible for procuring the required equipment and for training of hourly employees and contract employees. Training shall be conducted periodically as necessary and shall include all activities and procedures required by this work practice procedure, as well as by safety and health policies and programs.

## III. SUPERVISION AND ENFORCEMENT

On each shift that dust is unloaded from the Dore' baghouse, the Environmental Services Department supervisor shall be responsible for insuring compliance with the procedures described herein. These procedures will be strictly enforced. Failure to comply with the required procedures may result in formal disciplinary action for the offending employee(s). Depending on the severity and frequency of the violation, the offending employee(s) will be disciplined by means of an oral or written warning, time-off without pay, transfer to an alternate job and/or employment termination.

## IV. WEATHER CONDITIONS

This baghouse is not subject to wind speed limitations during unloading.

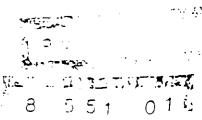
## V. <u>EQUIPMENT</u>

An auger will be used to transfer the dust from each hopper into a barrel. The discharge point of the auger will have a shroud attached that extends into the barrel. This shroud will help minimize fugitive emissions as the dust is transferred into from the barrel. A vacuum truck will be used to withdraw dust from the barrel and to subsequently transport the dust to the Residue Department. This truck shall also be utilized to perform housekeeping activities both during, if necessary, and after completion of the unloading procedure. At a minimum, the vacuum truck shall be equipped with a totally enclosed hopper except the vacuum exhaust which shall be filtered by means of a baghouse prior to discharge.

## VI. UNLOADING PROCEDURE

The procedure described herein below shall be utilized to perform Dore' baghouse dust unloading. This operation will be conducted by a minimum of two employees; one vacuum truck operator and one baghouseman. The six Dore' baghouse hoppers shall be unloaded using the following procedures:

- A. After positioning the vacuum truck near the Dore' baghouse, the operator shall inspect and prepare the truck to assure proper operation, particularly the hopper seals and vacuum exhaust baghouse.
- B. If any malfunction is detected prior to or during the course of unloading, the operation shall be immediately discontinued and shall not be resumed until the malfunction is corrected.
- C. In the Dore' baghouse control room, close the damper of the section to be unloaded and lock the control room door.
- D. Activate the vacuum truck blower and place the vacuum hose in the dust barrel.
- E. Activate the hopper auger to transfer the dust to the barrel.
- F. Open the hopper knife gate to allow the dust to enter the auger chamber.



- G During vacuuming, the truck operator shall monitor the dust level in the truck to prevent overfilling.
- H. Once the hopper for the particular section is empty, close the knife gate, unlock the control room door and open the section damper.
- I. Repeat Steps C, F & H for each of the remaining baghouse sections.
- J. Once the truck hopper is filled, the auger shall be de-activated, the vacuum hose emptied by aspirating with air and subsequently left in place.
- K. The vacuum blower shall then be turned off and the vacuum hose disconnected from the trunk.
- L. After the truck has transported the dust to the enclosed Residue fume bin, the rear hopper door of the truck shall be unlatched and the dust slowly dumped into the bin by slowly tilting the hopper.
- M. When empty, lower the hopper, relatch the hopper door and sweep off any excess dust from the rear of the truck.
- N. Repeat previous Steps A through M until the entire baghouse is empty.
- O. Upon completion or if the unloading operation is discontinued, deactivate the auger, remove the vacuum hose from the barrel and thoroughly vacuum any visible baghouse dust in the area.
- P. Reseal the knife gates on each of the six section hoppers.
- Q. Empty all dust from the truck hopper as described above in Steps L & M.
- R. After completion and prior to leaving the plant, the vacuum truck hopper, exterior and undercarriage shall be thoroughly washed with high-pressure water, or vacuumed if inclement weather prevents washing.
- S. The used vacuum hose shall always be stored at the plant.

#### VII. RECORD KEEPING

The Environmental Services Department supervisor shall be responsible for maintaining a baghouse unloading inspection log. The log shall be retained by the Environmental Sciences Department for at least two years following the date recorded.

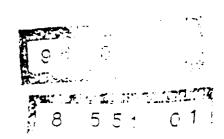
The Environmental Services Department supervisor shall make an entry in the baghouse unloading inspection log (attached) on the shift that Dore' baghouse unloading is conducted. Such entry shall include the day and date, time vacuuming started, name of baghouse unloaded, time vacuuming ceases, results of the inspection, name of inspector and any other pertinent comments. If baghouse unloading is discontinued for any reason, the reason(s) why it was discontinued shall be logged. Wind speed data for this baghouse is not required.

## VIII. CHANGE IN PROCEDURE

All Dore' baghouse unloading shall be conducted in accordance with the procedures described above, unless written approval is first obtained from the NDEQ. If any deviations from these procedures become necessary, the Environmental Sciences Department shall be immediately notified. The Environmental Sciences Department shall then apply for the necessary approval.

## IX. FORCE MAJEURE

The provisions of this work practice procedure shall be subject to the doctrine of force majeure.



# RESIDUE VENT BAGHOUSE DUST UNLOADING ASARCO - Omaha Plant

#### I. OBJECTIVE

The Residue vent baghouse (or Residue ventilation baghouse) provides ventilation for the cupola furnace and reverb furnace tap/skim hoods in the Residue Department. Prior to discharge, emissions captured by these hoods pass through the Residue vent baghouse where particulate matter is filtered and collected in one of two dust hoppers (east and west). The collected dust is continuously removed from the hoppers into covered containers which are periodically transported to the Residue Department for storage prior to further processing.

The objective of the following work practice procedure is to minimize, control and prevent the escape of fugitive dust emissions during the removal and transportation of the Residue vent baghouse dust. This will be accomplished through the implementation of work practice procedures described below.

## II. RESPONSIBILITY

The Environmental Services Department supervisor or Residue Department supervisor shall be responsible for assuring that Residue vent baghouse dust unloading is conducted according to the stated procedure. The Environmental Services Department supervisor and Residue Department supervisor will also be responsible for training of hourly employees. Training shall be conducted periodically as necessary and shall include all activities and procedures required by this work practice procedure, as well as by safety and health policies and programs.

## III. SUPERVISION AND ENFORCEMENT

On each shift that dust is transported via covered containers from the Residue vent baghouse, the Environmental Services Department supervisor or Residue Department supervisor shall be responsible for insuring compliance with the procedures described herein. These procedures will be strictly enforced. Failure to comply with the required procedures may result in formal disciplinary action for the offending employee(s). Depending on the severity and frequency of the violation, the offending employee(s) will be disciplined by means of an oral or written warning, time-off without pay, transfer to an alternate job and/or employment termination.

## IV. WEATHER CONDITIONS

This baghouse is not subject to wind speed limitations during unloading.

#### V. EQUIPMENT

A rotary valve will be used on each hopper to continuously transfer the dust into a covered fume container. The discharge point of the rotary valves will have shrouds attached that extend into the fume containers. These shrouds will minimize the fugitive emissions generated as the dust is transferred into the containers.

## VI. UNLOADING PROCEDURE

The Residue vent baghouse is designed to continuously transfer dust from the hoppers into covered fume containers. Once the fume containers are full, they are transferred to the Residue Department to be emptied. The following procedure is to be followed when transferring the fume containers.

- A. Deactivate the rotary valve on each hopper.
- B. Connect both fume containers to a tractor and leaving the covers on the containers, transfer them to the Residue craneway.
- C. Remove the covers and connect the crane bail to the containers.
- D. Once both containers are emptied, replace the covers and transport them back to the Residue vent baghouse.
- E. Position a container under each hopper, making sure the cloth shroud extends through the opening in the container cover.
- F. Activate the rotary valve on each hopper.

## VII. RECORD KEEPING

The Environmental Services Department supervisor or Residue Department supervisor shall be responsible for maintaining a baghouse unloading inspection log. The log shall be retained by the Environmental Sciences Department for at least two years following the date recorded.

#### VII. RECORD KEEPING

The Environmental Services Department supervisor shall be responsible for maintaining a baghouse unloading inspection log. The log shall be retained by the Environmental Sciences Department for at least two years following the date recorded.

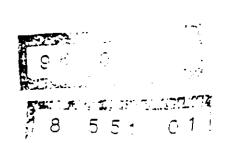
The Environmental Services Department supervisor shall make an entry in the baghouse unloading inspection log (attached) on the shift that Dore' baghouse unloading is conducted. Such entry shall include the day and date, time vacuuming started, name of baghouse unloaded, time vacuuming ceases, results of the inspection, name of inspector and any other pertinent comments. If baghouse unloading is discontinued for any reason, the reason(s) why it was discontinued shall be logged. Wind speed data for this baghouse is not required.

#### VIII. CHANGE IN PROCEDURE

All Dore' baghouse unloading shall be conducted in accordance with the procedures described above, unless written approval is first obtained from the NDEQ. If any deviations from these procedures become necessary, the Environmental Sciences Department shall be immediately notified. The Environmental Sciences Department shall then apply for the necessary approval.

#### IX. FORCE MAJEURE

The provisions of this work practice procedure shall be subject to the doctrine of force majeure.



## ANTIMONY BAGHOUSE DUST UNLOADING ASARCO - Omaha Plant

#### I. OBJECTIVE

The Antimony baghouse provides ventilation to the antimony crystallizing kettles located in the Refinery building (Sb kettle floor). Prior to discharge, emissions from the crystallizing kettles pass through the Antimony baghouse where particulate matter is filtered and collected in dust hoppers. Periodically, the collected dust must be removed from the hoppers and transported to the Residue Department for storage prior to further processing. During the unloading activity, fugitive dust emissions containing lead can be created.

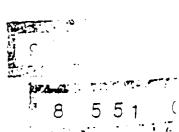
The objective of the following work practice procedure is to minimize, control and prevent the escape of fugitive dust emissions during the removal, transportation and subsequent unloading of the Antimony baghouse dust. This will be accomplished through the utilization of special equipment and the implementation of work practice procedures described below.

## II. <u>RESPONSIBILITY</u>

The Environmental Services Department supervisor shall be responsible for assuring that Antimony baghouse dust unloading is conducted according to the stated procedure. Dust shall not be removed from the Antimony baghouse without authorization from the Residue Department supervisor or higher management. The Environmental supervisor will also be responsible for procuring the required equipment and for training of hourly employees and contract employees. Training shall be conducted periodically as necessary and shall include all activities and procedures required by this work practice procedure, as well as by safety and health policies and programs.

## III. SUPERVISION AND ENFORCEMENT

On the shift that dust is unloaded from the Antimony baghouse, the Environmental Services Department supervisor shall be responsible for insuring compliance with the procedures described herein. These procedures will be strictly enforced. Failure to comply with the required procedures may



result in formal disciplinary action for the offending employee(s). Depending on the severity and frequency of the violation, the offending employee(s) will be disciplined by means of an oral or written warning, time-off without pay, transfer to an alternate job and/or employment termination.

## IV. WEATHER CONDITIONS

This baghouse is not subject to wind speed limitations during unloading.

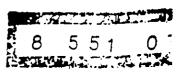
#### V. EQUIPMENT

A vacuum hopper is used to collect the dust from each hopper in the baghouse. A vacuum truck will be used to withdraw dust from the vacuum hopper and to subsequently transport the dust to the Residue Department. This truck shall also be utilized to perform housekeeping activities both during, if necessary, and after completion of the unloading procedure. At a minimum, the vacuum truck shall be equipped with a totally enclosed hopper except the vacuum exhaust which shall be filtered by means of a baghouse prior to discharge.

## VI. UNLOADING PROCEDURE

The procedure described herein below shall be utilized to perform Antimony baghouse dust unloading. This operation will be conducted by a minimum of two employees; one vacuum truck operator and one baghouseman. The Antimony baghouse hoppers shall be unloaded using the following procedures:

- A. After positioning the vacuum truck near the Antimony baghouse, the operator shall inspect and prepare the truck to assure proper operation, particularly the hopper seals and vacuum exhaust baghouse.
- B. If any malfunction is detected prior to or during the course of unloading, the operation shall be immediately discontinued and shall not be resumed until the malfunction is corrected.
- C. Open the doors on the east side of the Antimony baghouse to gain access to the hoppers.
- D. Attach the vacuum hose to the vacuum hopper.
- E. In the Antimony baghouse control room, close the damper on one of the four sections.
- F. Position the vacuum hopper under the baghouse hopper to be unloaded.



- G. Activate the vacuum truck blower and open the lever on the baghouse hopper. This will allow the dust to enter the vacuum hopper.
- H Once the baghouse hopper is empty, close the baghouse hopper lever.
- I. Repeat Steps F H until each of the hoppers in the section are empty.
- J. In the Antimony baghouse control room, open the section damper.
- K. Repeat Steps E J until the entire baghouse is empty.
- L. Once vacuuming is completed, the vacuum hose shall be emptied by aspirating with air.
- M. The vacuum blower shall then be turned off and the vacuum hose disconnected from the truck.
- N. Close the hopper access door on the east side of the baghouse.
- O. After the truck has transported the dust to the enclosed Residue fume bin, the rear hopper door of the truck shall be unlatched and the dust slowly dumped into the bin by slowly tilting the hopper.
- P. When empty, lower the hopper, relatch the hopper door and sweep off any excess dust from the rear of the truck.
- Q. After completion and prior to leaving the plant, the vacuum truck hopper, exterior and undercarriage shall be thoroughly washed with high-pressure water, or vacuumed if inclement weather prevents washing.
- R. The used vacuum hose shall always be stored at the plant.

## VII. RECORD KEEPING

The Environmental Services Department supervisor shall be responsible for maintaining a baghouse unloading inspection log. The log shall be retained by the Environmental Sciences Department for at least two years following the date recorded.

The Environmental Services Department supervisor shall make an entry in the baghouse unloading inspection log (attached) during the shift that Antimony baghouse unloading is conducted. Such entry shall include the day and date, time vacuuming started, name of baghouse unloaded, time vacuuming ceases, results of the inspection, name of inspector and any other pertinent comments.

If baghouse unloading is discontinued for any reason, the reason(s) why it was discontinued shall be logged. Wind speed data for this baghouse is not required.

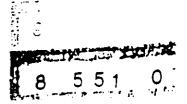
## VIII. CHANGE IN PROCEDURE

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All Antimony baghouse unloading shall be conducted in accordance with the procedures described above, unless written approval is first obtained from the NDEQ. If any deviations from these procedures become necessary, the Environmental Sciences Department shall be immediately notified. The Environmental Sciences Department shall then apply for the necessary approval.

## IX. FORCE MAJEURE

The provisions of this work practice procedure shall be subject to the doctrine of force majeure.



# ANTIMONY OXIDE CONTINUOUS OFFGRADE BAGHOUSE DUST UNLOADING ASARCO - Omaha Plant

#### I. OBJECTIVE

The Antimony Oxide continuous offgrade baghouse provides ventilation for the slag pot and premelt kettle hoods in the Antimony Oxide Department. Prior to discharge, emissions from these hoods pass through the continuous offgrade baghouse where particulate matter is filtered and collected in one of two dust hoppers (north and south). The collected dust is periodically removed from the hoppers and transported to the Residue Department for storage prior to further processing.

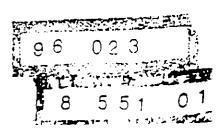
The objective of the following work practice procedure is to minimize, control and prevent the escape of fugitive dust emissions during the removal and transportation of the continuous offgrade baghouse dust. This will be accomplished through the implementation of work practice procedures described below.

#### II. RESPONSIBILITY

The Residue Department supervisor shall be responsible for assuring that continuous offgrade baghouse dust unloading is conducted according to the stated procedure. The Residue Department supervisor will also be responsible for training of hourly employees. Training shall be conducted periodically as necessary and shall include all activities and procedures required by this work practice procedure, as well as by safety and health policies and programs.

## III. SUPERVISION AND ENFORCEMENT

On each shift that dust is removed from the continuous offgrade baghouse, the Residue Department supervisor shall be responsible for insuring compliance with the procedures described herein. These procedures will be strictly enforced. Failure to comply with the required procedures may result in formal disciplinary action for the offending employee(s). Depending on the severity and frequency of the violation, the offending employee(s) will be disciplined by means of an oral or written warning, time-off without pay, transfer to an alternate job and/or employment termination.



#### IV. WEATHER CONDITIONS

This baghouse is not subject to wind speed limitations during unloading.

## V. <u>EQUIPMENT</u>

The continuous offgrade baghouse dust hoppers are located inside the Antimony Oxide building. A rotary valve will be used on each hopper to transfer the dust into a covered fume container. The discharge points of the rotary valves will have a hose attached that extends into the fume containers. These hoses will minimize the fugitive emissions generated as the dust is transferred into the containers.

## VI. <u>UNLOADING PROCEDURE</u>

The procedure described below shall be utilized to perform continuous offgrade baghouse unloading for both of the sections.

- A. Position a covered container under the hopper of the section to be unloaded, making sure the hose extends through the opening in the container cover.
- B. Open the knife gate on the dust hopper.
- C. Activate the rotary valve on the hopper. This will transfer the dust into the fume container.
- D. Once the hopper is empty, deactivate the rotary valve and close the knife gate.
- E. Connect the fume container to a tractor and leaving the cover on the container, transfer it to the Residue craneway.
- F. Remove the cover and connect the crane bail to the container so it can be emptied.
- G. Repeat Steps A F for the other section.
- H. Once both hoppers are empty, return the container to its storage location.

#### VII. RECORD KEEPING

The Residue Department supervisor shall be responsible for maintaining a baghouse unloading inspection log. The log shall be retained by the Environmental Sciences Department for at least two years following the date recorded.

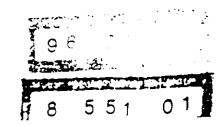
The Residue Department supervisor shall make an entry in the baghouse unloading inspection log (attached) during each shift the continuous offgrade baghouse is unloaded. Such entry shall include the day and date, time unloading started, name of baghouse, time unloading completed, results of the inspection, name of inspector and any other pertinent comments.

#### VIII. CHANGE IN PROCEDURE

All continuous offgrade baghouse unloading shall be conducted in accordance with the procedures described above, unless written approval is first obtained from the NDEQ. If any deviations from these procedures become necessary, the Environmental Sciences Department shall be immediately notified. The Environmental Sciences Department shall then apply for the necessary approval.

#### IX. FORCE MAJEURE

The provisions of this work practice procedure shall be subject to the doctrine of force majeure.



# ANTIMONY OXIDE INTERMITTENT OFFGRADE BAGHOUSE DUST UNLOADING ASARCO - Omaha Plant

### I. OBJECTIVE

The Antimony Oxide intermittent offgrade baghouse provides ventilation for the crystal hopper, hood cleaning station and button mould hoods in the Antimony Oxide Department. Prior to discharge, emissions from these areas pass through the intermittent offgrade baghouse where particulate matter is filtered and collected in a dust hopper. The collected dust is periodically removed from the hopper and transported to the Residue Department for storage prior to further processing.

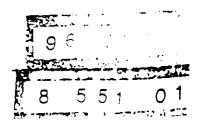
The objective of the following work practice procedure is to minimize, control and prevent the escape of fugitive dust emissions during the removal and transportation of the intermittent offgrade baghouse dust. This will be accomplished through the implementation of work practice procedures described below.

## II. RESPONSIBILITY

The Residue Department supervisor shall be responsible for assuring that intermittent offgrade baghouse dust unloading is conducted according to the stated procedure. The Residue Department supervisor will also be responsible for training of hourly employees. Training shall be conducted periodically as necessary and shall include all activities and procedures required by this work practice procedure, as well as by safety and health policies and programs.

#### III. SUPERVISION AND ENFORCEMENT

On each shift that dust is removed from the intermittent offgrade baghouse, the Residue Department supervisor shall be responsible for insuring compliance with the procedures described herein. These procedures will be strictly enforced. Failure to comply with the required procedures may result in formal disciplinary action for the offending employee(s). Depending on the severity and frequency of the violation, the offending employee(s) will be disciplined by means of an oral or written warning, time-off without pay, transfer to an alternate job and/or employment termination.



## IV WEATHER CONDITIONS

This baghouse is not subject to wind speed limitations during unloading.

#### V. EQUIPMENT

The intermittent offgrade baghouse dust hopper is located inside the Antimony Oxide building. A rotary valve will be used on the hopper to periodically transfer the dust into a portable covered fume container. The discharge point of the rotary valve will have a shroud attached that extends into the fume container. This shroud will minimize the fugitive emissions generated as the dust is transferred into the containers.

## VI. UNLOADING PROCEDURE

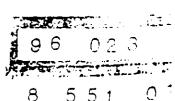
The procedure described below shall be utilized to perform intermittent offgrade baghouse unloading.

- A. Activate the rotary valve on the hopper. This will transfer the dust into the fume container.
- B. Once the hopper is empty, deactivate the rotary valve.
- C. Transport the container to the fume bin with a fork truck.
- D. Once the container is emptied, transport it back to the intermittent offgrade baghouse.
- E. Position the container under the hopper, making sure the cloth shroud extends through the opening in the container cover.

## VII. RECORD KEEPING

The Residue Department supervisor shall be responsible for maintaining a baghouse unloading inspection log. The log shall be retained by the Environmental Sciences Department for at least two years following the date recorded.

The Residue Department supervisor shall make an entry in the baghouse unloading inspection log (attached) during each shift the intermittent offgrade baghouse is unloaded. Such entry shall include the day and date, time unloading started, name of baghouse, time unloading completed, results of the inspection, name of inspector and any other pertinent comments.

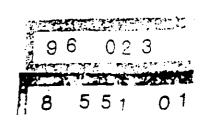


## VIII. CHANGE IN PROCEDURE

All intermittent offgrade baghouse unloading shall be conducted in accordance with the procedures described above, unless written approval is first obtained from the NDEQ. If any deviations from these procedures become necessary, the Environmental Sciences Department shall be immediately notified. The Environmental Sciences Department shall then apply for the necessary approval.

## IX. FORCE MAJEURE

The provisions of this work practice procedure shall be subject to the doctrine of force majeure.



# WORK PRACTICE PROCEDURE SOFTENER BAGHOUSE DUST UNLOADING ASARCO - Omaha Plant

#### I. OBJECTIVE

The softener baghouse (or baghouse #5) services the Bismuth cupel furnaces, the Bismuth premelt and deleading kettles, and the Refinery Department. Prior to discharge, emissions from these sources pass through the softener baghouse where particulate matter is filtered and collected in one of six dust cellars (#1 - #6). Periodically, the collected dust must be removed from the cellars and transported to the Residue Department for storage prior to further processing. During unloading, fugitive dust emissions containing lead can often be created.

The objective of the following Work Practice Procedure is to minimize, control, and prevent the escape of fugitive dust emissions during the removal, transportation, and subsequent unloading of the softener baghouse dust. This will be accomplished through the utilization of special equipment and the implementation of work practice procedures described below.

## II. RESPONSIBILITY

The Environmental Services Department Supervisor shall be responsible for assuring that softener baghouse dust unloading is conducted according to the stated procedure. Dust shall not be removed from the softener baghouse without authorization from the Residue Department Supervisor or higher management. The Environmental Supervisor will also be responsible for procuring the required equipment and for training of hourly employees and contract employees. Training shall be conducted periodically as necessary and shall include all activities and procedures required by this Work Practice Procedure, as well as by safety and health policies and programs.

## III. SUPERVISION AND ENFORCEMENT

On each shift that dust is unloaded from the softener baghouse, the Environmental Services Department Supervisor shall be responsible for insuring compliance with the procedures described herein. These procedures will be strictly enforced. Failure to comply with the required

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procedures may result in formal disciplinary action for the offending employee(s). Depending on the severity and frequency of the violation, the offending employee(s) will be disciplined by means of an oral or written warning, time-off without pay, transfer to an alternate job and/or employment termination.

#### IV. WEATHER CONDITIONS

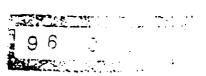
The maximum average wind speed at which dust unloading may occur at the softener baghouse is 12 mph. This is based on a 15 minute rolling average; i.e. after 15 minutes the average is updated every minute. No wind speed limitation applies when vacuuming dust through the vacuum ports that are installed on each cellar door.

#### V. EQUIPMENT

A vacuum truck will be used to withdraw dust from the softener baghouse cellars and to subsequently transport the dust to the Residue Department. This truck shall also be utilized to perform housekeeping activities both during, if necessary, and after completion of the unloading procedure. At a minimum, the vacuum truck shall be equipped with a totally enclosed hopper except the vacuum exhaust which shall be filtered by means of a baghouse prior to discharge.

On or before August 1, 1994, Asarco shall install vacuum ports in the cellar doors of the softener baghouse. These ports shall be no larger than necessary to accept a sliding pipe through which baghouse dust can be vacuumed. When not in use, the ports shall remain closed.

On or before August 1, 1994, Asarco shall install a new wind speed gauge located proximate to the smelter and softener baghouses. This gauge, which shall be calibrated annually, shall be connected to a data logger which will record the 15 minute average wind speed. A visual and audio alarm shall be located at the softener baghouse which will provide a warning once the 15 minute average wind speed reaches 11.9 mph. This will enable shut down procedures to commence prior to the 12 mph wind speed threshold being exceeded. The warning system will be activated and deactivated by a toggle switch located at the softener baghouse. The data logger will continuously update the 15 minute average once a minute, even when the warning system is deactivated. When the system is activated, the wind speed data is saved for downloading and, if the wind speed threshold was exceeded during the most recent 15 minute



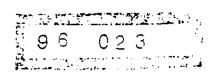
time period, the alarm will be triggered. This eliminates the need to wait (15 minutes before the cellar doors can be opened.

#### VI. UNLOADING PROCEDURES

The procedures described herein shall be utilized to perform softener baghouse dust unloading. This operation will be conducted by a minimum of two employees - one vacuum truck operator and one baghouseman. The six softener baghouse cellars shall be unloaded one at a time using the following procedures.

- A. After positioning the vacuum truck near the cellar to be unloaded, the operator shall inspect and prepare the truck to assure proper operation, particularly the hopper seals and vacuum exhaust baghouse.
- B. If any malfunction is detected prior to or during the course of unloading, the operation shall be immediately discontinued and shall not be resumed until the malfunction is corrected.
- C. In the softener baghosue control room, close the damper to the cellar to be unloaded. Follow all lockout/tagout procedures as outlined in the plant program.
- D. Initially, the cellar shall be vacuumed through the ports on the cellar door. This shall continue until all of the fume that can be captured by vacuuming through the ports is removed.
- E. Activate the wind speed recorder and alarm system by turning the toggle switch located at the softener baghouse to the on position. If at any time during dust unloading the alarm system is triggered, proceed to Step O.
- F. Remove the sand from the bottom of the cellar doors.
- G. Immediately vacuum any cellar dust that may spill out onto the unloading apron.

- H. Vacuum the cellar dust starting from the front of the cellar and working back.
- 1. During vacuuming, the truck operator shall monitor the dust level in the truck to prevent overfilling.
- J. Once the truck hopper is filled, the vacuum hose shall be emptied by aspirating with air and subsequently left in place.
- K. The vacuum blower shall then be turned off and the vacuum hose disconnected from the truck.
- L. After the truck has transported the dust to the enclosed Residue fume bin, the rear hopper door of the truck shall be unlatched and the dust slowly dumped into the bin by slowly tilting the hopper.
- M. When empty, lower the hopper, relatch the hopper door, and sweep off any excess dust from the rear of the truck.
- N. Repeat previous Steps A, B, and H M until the baghouse cellar is empty.
- O. Upon completion or if the unloading operation is discontinued, remove the vacuum equipment from the cellar and thoroughly vacuum any dust visible on the unloading apron.
- P. Close the cellar doors and deactivate the wind speed recorder by turning the toggle switch to the off position.
- Q. Reseal the door edges and replace the sand at the bottom of the cellar doors.
- R. In the control room, open the damper of the cellar that was unloaded.
- S. Empty all dust from the truck hopper as described above in Steps L and M.



- T. After completion and prior to leaving the plant, the vacuum truck hopper, exterior, and undercarriage shall be thoroughly washed with high-pressure water, or vacuumed if inclement weather prevents washing,
- U. The used vacuum hose shall always be stored at the plant.
- V. If the wind speed data logger or warning system equipment malfunctions, baghouse unloading shall not be conducted with the cellar doors open until the equipment is repaired or until NDEQ approves an alternate unloading method.

#### VII. RECORDKEEPING

The Environmental Services Department Supervisor shall be responsible for maintaining a baghouse unloading inspection log. The log and wind speed data shall be retained by the Environmental Sciences Department for at least two years following the date recorded.

The Environmental Services Department Supervisor shall make an entry in the baghouse unloading inspection log (attached) during each shift that softener baghouse unloading is conducted. Such entry shall include the day and date, time vacuuming started, whether vacuuming was only conducted through the vacuum ports, name of baghouse unloaded, times and duration the cellar doors were open, time vacuuming ceases, results of the inspection, name of inspector, and any other pertinent comments. If baghouse unloading is discontinued for any reason, the reason(s) why it was discontinued shall be logged.

For any shift in which the cellar doors were opened, the wind speed data from the data logger for the period in which the doors remained open shall be attached to the log. If vacuuming was conducted only through the vacuum ports, then wind speed data is not required and shall not be attached.

#### VIII. CHANGE IN PROCEDURE

All softener baghouse unloading shall be conducted in accordance with the procedures described herein, unless written approval is first obtained from the NDEQ. If any deviations from these procedures become necessary, the Environmental Sciences Department shall be immediately